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MSK.P-031-US/NP
PATENT APPLICATION

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for production of an autologous vaccine to tumor cells comprising transducing the tumor cells with one or more species of herpes simplex virus amplicon containing the gene for an [immunomodulatory] immunostimulatory protein and at least one additional therapeutic gene to provide transient expression of the [immunomodulatory] immunostimulatory protein and the therapeutic gene product by the cells.

1 2. (original) The method according to claim 1, wherein the tumor cells are transduced with the herpes simplex amplicons *ex vivo*.

1 2. 3. (original) The method according to claim 1, wherein the tumor cells are transduced with the herpes simplex amplicon *in vivo*.

1 2. 3. 4. (currently amended) A method for inducing a protective immune response to tumor cells in a patient comprising the step of transducing the tumor cells with one or more species of herpes simplex virus amplicon containing the gene for an [immunomodulatory] immunostimulatory protein and at least one additional therapeutic gene to provide transient expression of the [immunomodulatory] immunostimulatory protein and the therapeutic gene product by the cells.

1 2. 3. 4. 5. (original) The method according to claim 4, wherein the tumor cells are transduced with the amplicon *ex vivo*, further comprising the step of introducing the transduced tumor cells into the patient.

1 2. 3. 4. 5. 6. (original) The method according to claim 4, wherein the amplicons are injected into the site of the tumor cells *in vivo*.

1 7. (currently amended) The method according to claim 1, wherein the [immunomodulatory]
2 immunostimulatory protein is a cytokine.

1 8. (original) The method according to claim 7, wherein the cytokine is interleukin-2.

1 9. (original) The method according to claim 7, wherein the cytokine is granulocyte
2 macrophage colony stimulating factor.

1 10. (currently amended) The method according to claim 7, wherein the
2 [immunomodulatory] immunostimulatory protein is a chemokine.

1 11. (original) The method according to claim 10, wherein the chemokine is RANTES.

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1 12. (currently amended) The method according to claim 1, wherein the
2 [immunomodulatory] immunostimulatory protein is a intercellular adhesion molecule.

1 13. (original) The method according to claim 12, wherein the intracellular adhesion molecule
2 is ICAM-1.

1 14. (currently amended) The method according to claim 1, wherein the [immunomodulatory]
2 immunostimulatory protein is a costimulatory factor.

1 15. (original) The method according to claim 14, wherein the costimulatory factor is B7.1.

1 16. (currently amended) The method according to claim 1, wherein a population of tumor cells
2 is transduced with a plurality of species of amplicons containing the genes for the
3 [immunomodulatory] immunostimulatory protein and the additional therapeutic gene.

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1 17. (currently amended) The method according to claim 1, wherein the additional therapeutic
2 gene encodes a second [immunomodulatory] immunostimulatory protein.

1 18. (original) The method according to any of claims 17, wherein the tumor cells are
2 transduced with amplicons encoding and expressing at least two species of cytokines.

1 19. (original) The method according to claim 18, wherein tumor cells are transduced with
2 amplicons containing the genes for interleukin-2 and interleukin-12.

1 20. (original) The method according to claim 18, wherein the tumor cells are transduced with
2 amplicons encoding and expressing a cytokine and a costimulatory factor.

1 21. (original) The method according to claim 20, wherein tumor cells are transduced with
2 amplicons containing the genes for RANTES and B7.1.

1 22. (previously amended) The method according to claim 1, wherein the tumor cells are
2 hepatoma cells or lymphoma cells.

1 23. (currently amended) A mixture containing a plurality of species of herpes simplex virus
2 amplicons, including at least a first species of amplicon containing the gene for at least
3 one [immunomodulatory] immunostimulatory protein and a second species of amplicon
4 containing the gene for an additional therapeutic gene product.

1 24. (currently amended) The mixture according to claim 23, wherein the [immunomodulatory]
2 immunostimulatory protein is a cytokine.

1 25. (original) The mixture according to claim 24, wherein the cytokine is interleukin-2 or
2 granulocyte macrophage colony stimulating factor.

1 26. (currently amended) The mixture according to claim 23, wherein the
2 [immunomodulatory] immunostimulatory protein is a chemokine.

1 27. (original) The mixture according to claim 26, wherein the chemokine is RANTES.

1 28. (currently amended) The mixture according to claim 23, wherein the [immunomodulatory]
2 immunostimulatory protein is a intercellular adhesion molecule.

1 29. (original) The mixture according to claim 28, wherein the intracellular adhesion molecule
2 is ICAM-1.

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1 30. (currently amended) The mixture according to claim 23, wherein the [immunomodulatory]
2 immunostimulatory protein is a costimulatory factor.

1 31. (original) The mixture according to claim 30, wherein the costimulatory factor is B7.1.

1 32. (currently amended) The mixture according to claim 23, wherein the additional
2 therapeutic gene encodes a second [immunomodulatory] immunostimulatory protein.

1 33. (previously amended) The mixture according to claim 23, wherein the first and second
2 species of amplicons contains genes encoding for RANTES and B7.1.

1 34. (previously amended) The mixture according to claim 23, wherein the first and second
2 species of amplicons contains genes encoding for at least two species of cytokines.

1 35. (original) The mixture according to claim 34, wherein the amplicons contain genes
2 encoding for interleukin-2 and interleukin-12.

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1 36. (previously amended) Tumor cells transduced in accordance with the methods of claim 1.

1 37. (previously amended) Tumor cells transduced with a mixture of herpes simplex virus
2 amplicons in accordance with claim 23.

1 38. (currently amended) A method for production of an autologous vaccine to tumor cells
2 comprising transducing the tumor cells with a herpes simplex virus amplicon containing
3 the gene for an [immunomodulatory] immunostimulatory protein to provide transient
4 expression of the [immunomodulatory] immunostimulatory protein by the cells, wherein
5 the [immunomodulatory] immunostimulatory protein is selected from among
6 chemokines, intercellular adhesion molecules and costimulatory factors.

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1 39. (currently amended) The method according to claim [1] 38, wherein the tumor cells are
2 transduced with the herpes simplex amplicons *ex vivo*.

1 40. (currently amended) The method according to claim [1] 38, wherein the tumor cells are
2 transduced with the herpes simplex cell *in vivo*.